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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/989,714	11/20/2001	Steven Wang	CNTR-105xx	9578
207	7590	03/20/2006	EXAMINER EISEN, ALEXANDER	
WEINGARTEN, SCHURGIN, GAGNEBIN & LEOVICI LLP TEN POST OFFICE SQUARE BOSTON, MA 02109			ART UNIT 2674	PAPER NUMBER

DATE MAILED: 03/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/989,714

**Applicant(s)**

WANG, STEVEN

**Examiner**

Alexander Eisen

**Art Unit**

2674

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 26 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-48,50-61,64,65,67-71 and 74-87 is/are pending in the application.
- 4a) Of the above claim(s) 12-47 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,50-52,55,56,61,67,86 and 87 is/are rejected.
- 7) ☒ Claim(s) 3-11,48,53,54,57-60,64,65,68-71 and 74-85 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments with respect to the rejection(s) of claim(s) 1-10, 48, 50-61, 64, 65, 67-71 and 84-85 under various statutes have been fully considered and are persuasive.

Therefore, the rejection has been withdrawn. However, upon further search and consideration, new grounds of rejection follow.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 2, 50-52, 55, 56, 61, 67, 86 and 87 are rejected under 35 U.S.C. 102 (b) as being anticipated by Bidiville et al., US 5,703,356, hereinafter Bidiville.

With respect to claim 1 Bidiville discloses an optical sensor assembly (FIG. 2A) for tracking movement of a surface comprising a rounded target (ball 60) having a surface movably mounted to present a varying segment of the surface to a focus area; and an optical sensor 220 comprising a single sensing component, the sensing component mounted facing the surface at the focus area, the optical sensor operative to compare images of the surface at known time intervals, wherein the single sensing component detects a change in a position of the surface in multiple direction (FIG. 2; col. 6, line 40 – col. 7, line 60).

As pertaining to claim 2 the optical sensor is positioned substantially beneath the surface.

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As pertaining to claim 50, Bidiville also discloses a cursor control device (FIG. 1) having a base 50; a support mechanism 40, and employing the optical sensor assembly having similar features as the one in claim 1.

As pertaining to claim 51, the support mechanism has a member (outer wall 210 of ball cage 40 (FIG. 2) that is extending from one end to another end of the wall.

As pertaining to claim 52, the support member extends from a first support element at a first end to a second support element at a second end – at least three rollers (col. 6, lines 24-33).

As pertaining to claim 55, the surface is rollably supported by the support mechanism (using rollers or jeweled bearing surfaces – col. 6, lines 24-33).

As pertaining to claim 56, Bidiville further discloses that the support can be a bearing mechanism (see above citation in relevance to claim 55).

As pertaining to claim 61, Bidiville teaches that the surface is texturized, (col. 5, lines 62-65).

As pertaining to claim 67, the surface is rollably supported by the support mechanism (using rollers or jeweled bearing surfaces – col. 6, lines 24-33).

As pertaining to claim 86 and 87, Bidiville discloses that the optical sensor is operative to detect patterns in the surface, the pattern comprising the images to be compared (FIGS. 13-17; col. 7, lines 51-67; col. 9, lines 54-67).

***Allowable Subject Matter***

4. Claim 3-11, 48, 57-60, 64-65, 68-71 and 74-85 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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5. The following is a statement of reasons for the indication of allowable subject matter: claims above recites various limitations which neither have been found in the prior in conjunction with the limitations of parent claims, nor have been suggested as a modification of the cited prior art so as to arrive to these features.

*Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexander Eisen whose telephone number is (571) 272-7687. The examiner can normally be reached on M-F (9:00-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard A. Hjerpe can be reached on (571) 272-7691. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Alexander Eisen  
Primary Examiner  
Art Unit 2674

7 March 2006